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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,984	09/19/2005	Gerhard Hummel	4874/ PCT	3433

21553 7590 09/25/2006  
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EXAMINER
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HOOK, JAMES F

ART UNIT	PAPER NUMBER
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3754

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/549,984		HUMMEL ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	James F. Hook		3754	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2 and 11-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, and 11-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/19/05</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 11, 13, 15, 16, and 19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Oser.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 11-16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi in view of Oser. The patent to Kikuchi discloses the recited insulation arrangement for pipes comprising at least one insulation layer 2, an outer sheath 4 which can be made of a thin metal layer which is a metal foil layer, the ends of the insulation layers are seen to have a Z shaped termination profile as seen in figures 3 and 4, thereby forming a shell with at least one longitudinal seam in which the

insulation is inserted, where the Z shaped profile extends from a web adjacent the metal layer through a middle web, and to a lower web connected to the insulation, the shell is a full shell that is slipped over the pipe by means of the longitudinal seam, adhesive can be used along with a flap 4a to close the shell at the seam, where the insulation is formed as two half shells which can be adhesively bonded together, in a manner that utilizes a billet type structure such as seen in figures 5-7 as structure 6, and where the metal foil layer is made of aluminum or stainless steel, where the shell is considered to have a profiled shape. The patent to Kikuchi discloses all of the recited structure with the exception of forming the metal foil layer of titanium foil, and providing such with stiffening elements. The patent to Oser discloses that it is old and well known to form an outer metal foil layer of an insulating structure of either aluminum, stainless steel, or titanium type foils, and to provide such with ribs 24 which would act as stiffening elements formed adjacent to the foil outer layer. It would have been obvious to one skilled in the art to modify the outer metal foil layer of Kikuchi by substituting a titanium foil for the aluminum or stainless steel foil and to provide such with ribs to strengthen the foil layer as suggested by Oser where such is an equivalent material used for outer foil layers of insulation systems, and providing ribs would help strengthen the thin metal layer to prevent premature failure thereby saving money in replacement costs.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi in view of Oser as applied to claims 1, 2, 11-16, and 19 above, and further in view of Persson. The patent to Kikuchi as modified discloses all of the recited structure with the exception of providing outlet holes with warning wires to the shell.

Art Unit: 3754

The patent to Persson discloses that it is old and well known to provide an insulation sleeve with outlet holes provided with warning wires to monitor leakage from the pipe into the insulation layer. It would have been obvious to one skilled in the art to modify the insulation sleeve in Kikuchi as modified by providing holes with warning wires there through to detect leakage into the insulation as suggested by Persson where such would help prevent damage from leaks thereby saving money.

### ***Conclusion***

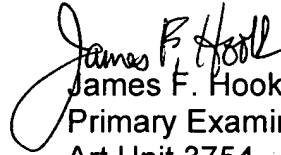
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references to Losse, Calzavara, Jordan, Cohen, Mottweiler, Isenberg, Breeding, Shannon, Lestak, Sommerer, Anderson, and Knittel disclosing state of the art insulation systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3754

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
James F. Hook  
Primary Examiner  
Art Unit 3754

JFH